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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,275	01/16/2004	Akihiro Ozeki	008312-0307686	5145

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EXAMINER
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FANTU, YALKEW

ART UNIT	PAPER NUMBER
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2838

DATE MAILED: 11/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/758,275	<b>Applicant(s)</b> OZEKI, AKIHIRO	
	<b>Examiner</b> Yalkew Fantu	<b>Art Unit</b> 2838	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 15-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 15-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent<sup>23</sup> in the United States.

Claim 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Marvin et al (US 6,761,987).

With respect to claim 1, Marvin et al discloses an electronic apparatus (Fig. 1 element 10) a fuel cell unit (Fig. 1 element 12) capable of generating power by chemical reaction (Fig. 1 elements 14 and 42), an auxiliary mechanism (such a fuel pump; fig. 1, 14) for the fuel cell, and a chargeable / dischargeable secondary battery (Fig. 1 element 22), comprising: a first control section (fig. 1, 40; par. 4, lines 41-46) to instruct the fuel cell unit to charge the secondary battery (fig. 1, 22) using power supplied from the fuel cell (fig. 1, 12) in a case where a capacity of the secondary battery is smaller than a first value when a power supply of the electronic apparatus is turned off (par. 4, lines 41-46); and a second control section (fig. 1, 40:13) to instruct the fuel cell unit to start up when a power supply of the electronic apparatus is turned on (par. 3, line 54-57; col. 4, lines 5-8), the fuel cell unit driving the auxiliary mechanism (fig. 1, 14) for the fuel cell using

power charged in the secondary battery (fig. 1, 22) in response to the instruction of the start up.

With respect to claim 2, Marvin et al teaches the electronics apparatus according to claim 1, further comprising a third control section to instruct the fuel cell unit to stop charging the secondary battery when a specific instruction is issued while the secondary stop (fig. 1, 40; PROG 13; has the capability to issue the instruction) charging the secondary battery (Fig. 1 element 22) when specific instruction issued while the secondary battery is being charged (fig. 2, 40:13).

With respect to claim 3, Marvin also discloses further comprising a third control section to instruct the fuel cell unit to stop charging (fig. 1, 40; PROG 13) the secondary battery (Fig. 1 element 22) and turns on the power supply of the electronics apparatus (Fig. 1 20) if a specific instruction is issued (Fig. 1 element 13; Col. 3 40-46).

With respect to claim 4, the electronics apparatus according to claim 1 (Fig. 1 10), further comprising a third control section to instruct the fuel cell unit to stop (fig. 1, 40; PROG 13) the secondary battery (Fig. 1 element 22) when a predetermined period of time elapses after the battery starts to be charged (Fig. 2 and 3; Col 4 lines 5-20).

With respect to claims 5, 6 and 7 Marvin discloses a further comprising a third control section to instruct the fuel cell unit to stop (fig. 1, 40; PROG 13) charging the secondary battery (Fig. 1 element 22) when the capacity exceeds a second value after the battery starts (Col. 4 lines 40-45). An operational control method using (fig. 1, 40: 11 and 13) an electronic apparatus (Fig.1 element 20) to which a fuel cell unit is attachable, the fuel cell unit including a fuel cell (Fig. 1 element 12), and capable of generating

Art Unit: 2838

power by chemical reaction (Fig. 1 elements 14, 42 and 44), an auxiliary mechanism for the fuel cell (fig. 1, 14), and a chargeable/dischargeable secondary battery, the electronic apparatus being capable of receiving power (fig. 1, 20) supplied from the fuel cell or the secondary battery (Fig. 1 22).

With respect to claims 8, 9 and 10, Marvine discloses instructing, by the electronic apparatus, the fuel cell unit to stop (fig. 1, 40; 11 and PROG 13) charging the secondary battery when a predetermined period of time elapses and turning on power if a specific instruction is issued (Col. 4 1-20; Fig. 2 and 3).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marvine in view of Pratt et al. (US 2003/0194589).

With respect to claims 15-17, Marvine discloses an electronic apparatus (fig. 1, 20) to which a fuel cell unit is attachable (fig. 1, 12), the fuel cell unit including a fuel cell capable of generating power by chemical reaction (fig. 1, 14 and 42), an auxiliary mechanism (fig. 1, 14) for the fuel cell, and a chargeable/dischargeable secondary battery (fig. 1, 22), the electronic apparatus being capable of receiving power supplied from the fuel cell (fig. 1, 12) or the secondary battery 22, the electronic apparatus comprising: a first control section information of a capacity (fig. 1, 40; 11 LUT display list

Art Unit: 2838

of info) of the secondary battery 22 is smaller than a preset value (col. 4, 40-47); a second control section (fig. 1, 40:13) to display information on a second screen in which at least one of a capacity of the secondary battery to be achieved (col. 3, lines 54-57) and a time period to be charged is settable (fig. 2); a third control section to instruct (fig. 1, 40:13 the program) the fuel cell unit 12 to charge the secondary battery 22 in accordance with a content set on the second screen when the at least one of the capacity of the secondary battery to be achieved (col. 3, 54-57) and the time period to be charged is set on the second screen, and turn off a power supply of the electronic apparatus after the charging is completed (the controller 40 has the capability to activates for charging, and turn off when charge is completed: col. 4, 41-46), further comprising a fourth control section to instruct the fuel cell unit to start up when the power supply of the electronic apparatus is turned on (the controller 40 with LUT 11 and PROG 13 program keeps instructing the fuel cell unit to start power supply as mentioned above, but does not expressly teaches a display means. Pratt et al, however, discloses a display means (page7, lines 46-48).

Marvine et al and Pratt et al. are analogous arts because they are from the same field of endeavor namely Fuel cell power source.

At the time of the invention it would have been obvious to a person having ordinary skill in the art to provide a display means as taught by Pratt et al to the fuel cell system of Marvine et al. to ensure the remaining capacity of the secondary battery. The reason for doing would have been that the use of display means in order to display a

residual capacity of the battery to charge before it completely depleted and damaged at the result of over discharge.

### **Response to Arguments**

Applicant's arguments filed on 06/07/2006 have been considered but are ineffective to overcome the Marvine reference. (See the rejection above).

Regarding claims 1-10, applicant argues that Marvine does not determine "... a first control section to instruct the fuel cell unit to charge the battery... and second control section to instruct the fuel cell unit to start up when a power supply of the electronic apparatus is on..."

Marvine, however, discloses a first control section (fig. 1, 40; par. 4, lines 41-46) to instruct the fuel cell unit to charge the secondary battery (fig. 1, 22) using power supplied from the fuel cell (fig. 1, 12) in a case where a capacity of the secondary battery is smaller than a first value when a power supply of the electronic apparatus is turned off (par. 4, lines 41-46); and a second control section (fig. 1, 40:13) to instruct the fuel cell unit to start up when a power supply of the electronic apparatus is turned on (par. 3, line 54-57; col. 4, lines 5-8), the fuel cell unit driving the auxiliary mechanism (fig. 1, 14) for the fuel cell using power charged in the secondary battery (fig. 1, 22) in response to the instruction of the start up.

Regarding claim 15-17, applicant argues that Marvine dose not disclose an electronic apparatus, and...first screen indicating... capacity of secondary battery... to display information ... of a secondary battery". Marvine, however, discloses an electronic apparatus (i.e., portable electronic apparatus) to which the electronic cell unit

Art Unit: 2838

is attachable (col. 1, 45-47), residential fuel system is one of the many examples disclosed). But, Marvine's fuel cell system has a load fig. 1, 20, which is capable of being a portable electronic apparatus that can be, attach or detach. Besides, the load is attached when connected to the fuel cell system. Marvine further discloses a first control section to display information a capacity (fig. 1, 40: 11 LUT display list of info) of the secondary battery 22 is smaller than a preset value (col. 4, 40-47); a second control section (fig. 1, 40:13). But as for the display means Pratt et al disclose as mentioned above in page 7, lines 46-48).

Final necessitated by amendment.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

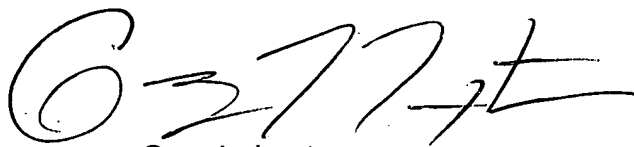
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yalkew Fantu whose telephone number is 571-272-8928. The examiner can normally be reached on M - F: 7- 4.



Art Unit: 2838

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Karl Easthom can be reached on (571) 272-1989. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'G. Laxton', with a stylized flourish at the end.

Gary L. Laxton  
Primary Examiner  
Art Unit 2838

11/02/2006